

Appl. No. 09/974,775
Amdt. dated September 20, 2004
Reply to Office Action of April 20, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Claims 15-18 have been amended. Support for the amendments to claims 15-18 is found, *inter alia*, in originally filed independent claim 10. No new matter has been added.

Listing of Claims:

Claims 1-14 (canceled)

Claim 15 (currently amended): A golf ball composition comprising:

a syndiotactic 1,2-polybutadiene having a crystallinity between about 5% and about 50%, a mean molecular weight between about 10,000 and about 350,000, and a percentage of 1,2-bonds of greater than about 70%;

~~polymers selected from the group consisting of ionomeric polymers, non-ionomeric polymers, and mixtures thereof; and~~

a crosslinking agent, co-crosslinking agent, crosslinking accelerator, or mixtures thereof;

wherein the ratio by weight of the syndiotactic 1,2-polybutadiene to the ionomeric polymers ranges between about 5:90 and about 90:5, and the ratio by weight of the crosslinking agent to the syndiotactic 1,2-polybutadiene and the ionomeric polymers ranges between about 0.1:100 and about 10:100.

Claim 16 (currently amended): A golf ball composition as defined in claim 15, wherein the ratio by weight of the crosslinking agent to the syndiotactic 1,2-polybutadiene and the ionomeric polymers ranges between about 0.1:100 and about 5:100.

Appl. No. 09/974,775
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Claim 17 (currently amended): A golf ball composition comprising:

a syndiotactic 1,2-polybutadiene having a crystallinity between about 5% and about 50%, a mean molecular weight between about 10,000 and about 350,000, and a percentage of 1,2-bonds of greater than about 70%;

~~polymers selected from the group consisting of ionomeric polymers, non-ionomeric polymers, and mixtures thereof; and~~

a crosslinking agent, co-crosslinking agent, crosslinking accelerator, or mixtures thereof;

wherein the ratio by weight of the syndiotactic 1,2-polybutadiene to the ionomeric polymers ranges between about 5:90 and about 90:5, and the ratio by weight of the crosslinking accelerator and the co-crosslinking agent to the syndiotactic 1,2-polybutadiene and the ionomeric polymers ranges between about 0.1:100 and about 20:100.

Claim 18 (currently amended): A golf ball composition as defined in claim 17, wherein the ratio by weight of the crosslinking accelerator and the co-crosslinking agent to the syndiotactic 1,2-polybutadiene and the ionomeric polymers ranges between about 0.1:100 and about 10:100.

Claim 19 (previously presented): A golf ball composition comprising:

a syndiotactic 1,2-polybutadiene having a crystallinity between about 5% and about 50%, a mean molecular weight between about 10,000 and about 350,000, and a percentage of 1,2-bonds of greater than about 70%;

polymers selected from the group consisting of ionomeric polymers, non-ionomeric polymers, and mixtures thereof; and

a copolymer having a glycidyl group, hydroxyl group, maleic anhydride group or carboxylic group;

wherein the ratio by weight of the syndiotactic 1,2-polybutadiene to the polymers ranges between about 5:90 and about 90:5.

Appl. No. 09/974,775
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Claim 20 (previously presented): A golf ball composition as defined in claim 19, wherein the ratio by weight of the copolymer having a glycidyl group, hydroxyl group, maleic anhydride group or carboxylic group to the syndiotactic 1,2-polybutadiene and the polymers ranges between about 1:100 and about 20:100.

Claim 21 (previously presented): A golf ball composition as defined in claim 20, wherein the ratio by weight of the copolymer having a glycidyl group, hydroxyl group, maleic anhydride group or carboxylic group to the syndiotactic 1,2-polybutadiene and the polymers ranges between about 1:100 and about 15:100.

Claims 22-38 (canceled)